

ABSTRACTALUMINUM ALLOY STRIP MANUFACTURING PROCESS FOR THE
MANUFACTURE OF BRAZED HEAT EXCHANGERS

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The invention relates to a process to manufacture a clad strip, < 1.5 mm thick, intended for the manufacture of brazed heat exchangers, comprising:

- casting of a plate made of core alloy composed
10 as follows (% by weight):

Si < 0.8 Fe < 0.8 Cu: 0.2 - 0.9 Mn: 0.7 - 1.5
Mg < 0.4 Zn < 0.2 Ti < 0.1 other elements < 0.05
each and < 0.15 in total, the remainder aluminium,

- homogenization of said plate between 550 and
15 630°C for at least one hour,

- cladding on one or two sides of said blank of a
brazing aluminium alloy, preferentially containing 5 to
13% silicon,

- hot rolling followed by cold rolling of the
20 plated blank to a thickness close to the final
thickness,

- recrystallization annealing of the strip between
300 and 400°C,

- strain hardening of the annealed strip to obtain
25 a permanent deformation between 2 and 10% and the final
thickness.

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Figure 1: characteristic microstructure of liquid film migration.

Figure 2: microstructure with no LFM

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